

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

CANCEL claims 42, 45-48, 50-72, and 74-77.

REWRITE the following claims:

43. (Currently Amended) An ~~The~~ atomic force microscope ~~as recited in claim 42,~~ including an optical lever system, comprising:

a scanning mechanism;

an optical lever system including a light source not moved by said scanning mechanism;

a cantilever moved by said scanning mechanism so that said cantilever may be scanned over a sample;

a position detector not moved by said scanning mechanism which receives a reflected light from said cantilever and detects an angular deflection of a free end of said cantilever; and

said atomic force microscope further comprising an optical assembly including at least one steering lens to guide light emitted from said light source onto said cantilever to follow substantially a fixed position on said cantilever during movement of said scanning mechanism, wherein light reflected to said position detector does not pass through said steering lens.

44. (Previously presented) An atomic force microscope as recited in claim 43, wherein said position detector is located substantially at a point where light beams reflected from said cantilever converge when said cantilever is undeflected during a full extent of movement of said scanning mechanism so that said position detector is substantially sensitive to a deflection motion of said cantilever rather than a scanning motion of said cantilever.

49. (Currently amended) A method ~~as recited in claim 48,~~ of operating an atomic force microscope having an optical lever system with a light source, a cantilever and a position detector, and further having a steering lens assembly attached to a steering mechanism, the method comprising the steps of:

generating light;

directing said light onto said cantilever using said steering lens assembly so that said light strikes a substantially fixed position on said cantilever during a movement of said scanning mechanism; and

receiving a reflected light reflected from said cantilever using said position detector to detect an angular bending of said cantilever, wherein the step of directing

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further comprising the steps of [:] splitting said light into a first beam which strikes said cantilever and a second beam which is directed to a second position detector.

NOTE: The above action has been taking because claims 43, 44, and 49 have been deemed allowable in the interference decision dated 22 February 2011. The remaining outstanding claims have been canceled in lieu of the adverse decision regarding those claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LARKIN whose telephone number is (571)272-2198. The examiner can normally be reached on 8:30 AM - 5:00 PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Daniel S. Larkin/
Primary Examiner, Art Unit 2856